What is claimed is:

1. A method for providing processed image data to a client,
who requests an image-processing service from an image-
processing service provider, said processed image data being
generated by processing an original image submitted by said
client as an object of said image-processing service, so as
to conform with device characteristics of an output device,
said method comprising the steps of:

acquiring original image data, which include expanded
color-range image data, from said original image;

determining a first optimizing condition, serving as a
first rendering condition, for generating first output-
referred image data from device characteristic data in
respect to a first output device and said original image data
including said expanded color-range image data, in order to
generate first optimizing condition data;

storing said original image data including said
expanded color-range image data and said first optimizing
condition data, representing said first optimizing condition,
while correlating them; and

providing said original image data including said
expanded color-range image data and said first optimizing

condition data, stored in said storing step, to said client,
based on a providing procedure established in advance.

2. The method of claim 1,

    wherein, in said storing step, said first optimizing
condition data are stored as tag information of said expanded
color-range image data.

3. The method of claim 1, further comprising the step of:

    generating reduced image data, being suitable for said
output device, from said original image data and either said
first optimizing condition data or other optimizing condition
data, so that a size of said reduced image data becomes
smaller than that of said expanded color-range image data;

    wherein, in said storing step, said reduced image data
are stored while being correlated with said original image
data and/or said first optimizing condition data.

4. The method of claim 3, further comprising the step of:

    generating first differential image data, which
represent a difference between said expanded color-range
image data and said reduced image data;

wherein, in said storing step, said first differential image data are stored while being correlated with said reduced image data.

5. The method of claim 4,

wherein, in said storing step, said first differential image data are stored as tag information of said reduced image data.

6. The method of claim 1,

wherein said first output device is a printer equipped at said image-processing service provider or another print service provider.

7. The method of claim 1,

wherein said first output device is a printer equipped at a site of said client who requests said image-processing service from said image-processing service provider.

8. The method of claim 1, further comprising the step of:

setting an output device designated by said client as said first output device.

9. The method of claim 1, further comprising the step of:

generating said first output-referred image data from said original image data, based on said first optimizing condition;

wherein, in said storing step, said first output-referred image data are stored while being correlated with said original image data including said expanded color-range image data and/or said first optimizing condition data.

10. The method of claim 9,

wherein, in said storing step, said first optimizing condition data are stored as tag information of said first output-referred image data.

11. The method of claim 9, further comprising the step of:

generating second differential image data, which represent a difference between said expanded color-range image data and said first output-referred image data;

wherein, in said storing step, said second output-referred image data are stored while being correlated with said first output-referred image data.

12. The method of claim 9,

wherein, in said determining step, a second optimizing condition, serving as a second rendering condition, for generating second output-referred image data from second device characteristic data in respect to a second output device and said original image data including said expanded color-range image data, is determined; and

wherein, in said generating step, said second output-referred image data are generated from said original image data, based on said second optimizing condition; and

wherein, in said storing step, said first output-referred image data are stored while being correlated with said second output-referred image data.

13. The method of claim 12, further comprising the step of:

generating third differential image data, which represent a difference between said first output-referred image data and said second output-referred image data;

wherein, in said storing step, said third differential image data are stored while being correlated with said second output-referred image data.

14. The method of claim 1, further comprising the step of:

producing a first print having a first image formed on a printing medium by said first output device, based on said first output-referred image data;

wherein, during said producing step, said first output-referred image data are correlated with said original image data and said first optimizing condition.

15. The method of claim 14,

wherein, in said determining step, a third optimizing condition, which is different from said first optimizing condition in respect to at least one processing condition and/or a processing order, is determined; and

wherein, in said generating step, third output-referred image data are generated from said original image data, based on said third optimizing condition; and

wherein, in said producing step, said first output device produces a second print by forming a second image on said printing medium, based on said third output-referred image data.

16. The method of claim 15,

wherein, in said producing step, said first output device produces said second print by forming said second

image on said printing medium, based on a difference between said first output-referred image data and said third output-referred image data.

17. The method of claim 15,

    wherein, in said producing step, said first output device produces said second print by forming both said first image and said second image on said printing medium.

18. The method of claim 15,

    wherein, in said producing step, said first output device produces said second print by forming a reduced image, which is obtained by reducing a third image formed from said third output-referred image data, on said printing medium.

19. The method of claim 15, further comprising the step of:

    trimming a part of a third image formed from said third output-referred image data;

    wherein, in said producing step, said first output device produces said second print by forming said third image, said part of which is trimmed in said trimming step, on said printing medium, based on said third output-referred image data.

20. The method of claim 1,

    wherein, in said storing step, said original image

data, including said expanded color-range image data, and

said first optimizing condition data are stored in a

computer-readable storage medium, while correlating them with

each other.

21. The method of claim 1,

    wherein, in said storing step, said original image

data, including said expanded color-range image data, and

said first optimizing condition data are stored in a server

coupled to a communication network, while correlating them

with each other.

22. The method of claim 1,

    wherein, in said storing step, an optimization

processing program, for acquiring a fourth optimizing

condition, based on said original image data including

expanded color-range image data and said first optimizing

condition, is stored in a computer-readable storage medium.

23. The method of claim 22,

wherein, in said storing step, said optimization

processing program, for generating and storing a fourth

output-referred image data, based on said original image data

including expanded color-range image data and said fourth

optimizing condition data, is stored in said computer-

readable storage medium.

24. The method of claim 23,

wherein, in said storing step, said optimization

processing program, for storing said fourth output-referred

image data while correlating said fourth output-referred

image data with said original image data including said

expanded color-range image data and/or said first optimizing

condition data, is stored in said computer-readable storage

medium.

25. The method of claim 22,

wherein, in said storing step, said optimization

processing program, for storing said fourth optimizing

condition data while correlating said fourth optimizing

condition data with said original image data including said

expanded color-range image data and/or said first optimizing

condition data, is stored in said computer-readable storage medium.

26. The method of claim 1,

wherein, in said acquiring step, scene-referred image data, which are standardized from scene-referred raw data, including device characteristics of an image-capturing apparatus, by compensating for said device characteristics, are acquired as said expanded color-range image data; and

wherein, in said storing step, said scene-referred image data and said first optimizing condition are stored while being correlated with each other.

27. An apparatus for generating data, which are employed for acquiring processed image data suitable for device characteristics of an output device from an original image, in order to store said data in it, said apparatus comprising:

an acquiring section to acquire original image data, which include expanded color-range image data, from said original image;

a determining section to determine a first optimizing condition, serving as a first rendering condition, for generating first output-referred image data from device

characteristic data in respect to a first output device and
said original image data including said expanded color-range
image data, in order to generate first optimizing condition
data; and

a storing section to store said original image data
including said expanded color-range image data and said first
optimizing condition data, representing said first optimizing
condition, while correlating them.

28. The apparatus of claim 27,

wherein said storing section stores said first
optimizing condition data as tag information of said expanded
color-range image data.

29. The apparatus of claim 27, further comprising:

a reduced image data generating section to generate
reduced image data, being suitable for said output device,
from said original image data and either said first
optimizing condition data or other optimizing condition data,
so that a size of said reduced image data becomes smaller
than that of said expanded color-range image data;

wherein said storing section stores said reduced image
data while correlating said reduced image data with said

original image data and/or said first optimizing condition
data.

30. The apparatus of claim 29, further comprising:

a first differential image data generating section to
generate first differential image data, which represent a
difference between said expanded color-range image data and
said reduced image data;

wherein said storing section stores said first
differential image data while correlating said first
differential image data with said reduced image data.

31. The apparatus of claim 29,

wherein said storing section stores said first
differential image data as tag information of said reduced
image data.

32. The apparatus of claim 27,

wherein said first output device is a printer equipped
at an image-processing service provider or another print
service provider.

33. The apparatus of claim 27,

wherein said first output device is a printer equipped at a site of a client who requests an image-processing service from an image-processing service provider.

34. The apparatus of claim 27, further comprising:

an output device setting section to set an output device, designated by a client who requests an image-processing service from an image-processing service provider, as said first output device.

35. The apparatus of claim 27, further comprising:

an output-referred image data generating section to generate said first output-referred image data from said original image data, based on said first optimizing condition;

wherein said storing section stores said first output-referred image data while correlating said first output-referred image data with said original image data including said expanded color-range image data and/or said first optimizing condition data.

36. The apparatus of claim 35,

wherein said storing section stores said first

optimizing condition data as tag information of said first

output-referred image data.

37. The apparatus of claim 35, further comprising:

a differential image data generating section to

generate second differential image data, which represent a

difference between said expanded color-range image data and

said first output-referred image data;

wherein said storing section stores said second output-

referred image data while correlating said second output-

referred image data with said first output-referred image

data.

38. The apparatus of claim 35,

wherein said determining section determines a second

optimizing condition, serving as a second rendering

condition, for generating second output-referred image data

from second device characteristic data in respect to a second

output device and said original image data including said

expanded color-range image data; and

wherein said output-referred image data generating

section generates said second output-referred image data from

said original image data, based on said second optimizing
condition; and

wherein said storing section stores said first output-
referred image data while correlating said first output-
referred image data with said second output-referred image
data.

39. The apparatus of claim 38, further comprising:

a differential image data generating section to
generate third differential image data, which represent a
difference between said first output-referred image data and
said second output-referred image data;

wherein said storing section stores said third
differential image data while correlating said third
differential image data with said second output-referred
image data.

40. The apparatus of claim 27, further comprising:

a print producing section to produce a first print
having a first image formed on a printing medium by said
first output device, based on said first output-referred
image data;

wherein, during producing said first print, said print producing section correlates said first output-referred image data with said original image data and said first optimizing condition.

41. The apparatus of claim 40,

wherein said determining section determines a third optimizing condition, which is different from said first optimizing condition in respect to at least one processing condition and/or a processing order; and

wherein said output-referred image data generating section generates third output-referred image data from said original image data, based on said third optimizing condition; and

wherein said print producing section makes said first output device to produce a second print by forming a second image on said printing medium, based on said third output-referred image data.

42. The apparatus of claim 41,

wherein said print producing section makes said first output device to produce said second print by forming said second image on said printing medium, based on a difference

between said first output-referred image data and said third

output-referred image data.

43. The apparatus of claim 41,

        wherein said print producing section makes said first

output device to produce said second print by forming both

said first image and said second image on said printing

medium.

44. The apparatus of claim 41,

        wherein said print producing section makes said first

output device to produce said second print by forming a

reduced image, which is obtained by reducing a third image

formed from said third output-referred image data, on said

printing medium.

45. The apparatus of claim 41, further comprising:

        a trimming section to trim a part of a third image

formed from said third output-referred image data;

        wherein said print producing section makes said first

output device to produce said second print by forming said

third image, said part of which is trimmed by said trimming

section, on said printing medium, based on said third output-referred image data.

46. The apparatus of claim 27,

wherein said storing section stores said original image data, including said expanded color-range image data, and said first optimizing condition data in a computer-readable storage medium, while correlating them with each other.

47. The apparatus of claim 27,

wherein said storing section stores said original image data, including said expanded color-range image data, and said first optimizing condition data in a server coupled to a communication network, while correlating them with each other.

48. The apparatus of claim 27,

wherein said storing section stores an optimization processing program, for acquiring a fourth optimizing condition, based on said original image data including expanded color-range image data and said first optimizing condition, in a computer-readable storage medium.

49. The apparatus of claim 48,

wherein said storing section stores said optimization processing program, for generating and storing a fourth output-referred image data, based on said original image data including expanded color-range image data and said fourth optimizing condition data, in said computer-readable storage medium.

50. The apparatus of claim 49,

wherein said storing section stores said optimization processing program, for storing said fourth output-referred image data while correlating said fourth output-referred image data with said original image data including said expanded color-range image data and/or said first optimizing condition data, in said computer-readable storage medium.

51. The apparatus of claim 48,

wherein said storing section stores said optimization processing program, for storing said fourth optimizing condition data while correlating said fourth optimizing condition data with said original image data including said expanded color-range image data and/or said first optimizing condition data, in said computer-readable storage medium.

52. The apparatus of claim 1,

wherein said acquiring section acquires scene-referred image data, which are standardized from scene-referred raw data including device characteristics of an image-capturing apparatus by compensating for said device characteristics, as said expanded color-range image data; and

wherein said storing section stores said scene-referred image data and said first optimizing condition while correlating them with each other.

53. A computer program for executing controlling-operations for generating and storing data, which are employed for acquiring processed image data suitable for device characteristics of an output device from an original image, said computer program comprising the functional steps of:

acquiring original image data, which include expanded color-range image data, from said original image;

determining a first optimizing condition, serving as a first rendering condition, for generating first output-referred image data from device characteristic data in respect to a first output device and said original image data

including said expanded color-range image data, in order to generate first optimizing condition data; and

storing said original image data including said expanded color-range image data and said first optimizing condition data, representing said first optimizing condition, while correlating them.

54. The computer program of claim 53,

wherein, in said storing step, said first optimizing condition data are stored as tag information of said expanded color-range image data.

55. The computer program of claim 53, further comprising the functional step of:

generating reduced image data, being suitable for said output device, from said original image data and either said first optimizing condition data or other optimizing condition data, so that a size of said reduced image data becomes smaller than that of said expanded color-range image data;

wherein, in said storing step, said reduced image data are stored while being correlated with said original image data and/or said first optimizing condition data.

56. The computer program of claim 55, further comprising the functional step of:

generating first differential image data, which represent a difference between said expanded color-range image data and said reduced image data;

wherein, in said storing step, said first differential image data are stored while being correlated with said reduced image data.

57. The computer program of claim 56,

wherein, in said storing step, said first differential image data are stored as tag information of said reduced image data.

58. The computer program of claim 53,

wherein said first output device is a printer equipped at an image-processing service provider or another print service provider.

59. The computer program of claim 53,

wherein said first output device is a printer equipped at a site of a client who requests an image-processing service from an image-processing service provider.

60. The computer program of claim 53, further comprising the functional step of:

    setting an output device designated by said client as said first output device.

61. The computer program of claim 53, further comprising the functional step of:

    generating said first output-referred image data from said original image data, based on said first optimizing condition;

    wherein, in said storing step, said first output-referred image data are stored while being correlated with said original image data including said expanded color-range image data and/or said first optimizing condition data.

62. The computer program of claim 61,

    wherein, in said storing step, said first optimizing condition data are stored as tag information of said first output-referred image data.

63. The computer program of claim 61, further comprising the functional step of:

generating second differential image data, which

represent a difference between said expanded color-range

image data and said first output-referred image data;

wherein, in said storing step, said second output-

referred image data are stored while being correlated with

said first output-referred image data.

64. The computer program of claim 61,

wherein, in said determining step, a second optimizing

condition, serving as a second rendering condition, for

generating second output-referred image data from second

device characteristic data in respect to a second output

device and said original image data including said expanded

color-range image data, is determined; and

wherein, in said generating step, said second output-

referred image data are generated from said original image

data, based on said second optimizing condition; and

wherein, in said storing step, said first output-

referred image data are stored while being correlated with

said second output-referred image data.

65. The computer program of claim 64, further comprising the

functional step of:

generating third differential image data, which represent a difference between said first output-referred image data and said second output-referred image data;

wherein, in said storing step, said third differential image data are stored while being correlated with said second output-referred image data.

66. The computer program of claim 53, further comprising the functional step of:

producing a first print having a first image formed on a printing medium by said first output device, based on said first output-referred image data;

wherein, during said producing step, said first output-referred image data are correlated with said original image data and said first optimizing condition.

67. The computer program of claim 66,

wherein, in said determining step, a third optimizing condition, which is different from said first optimizing condition in respect to at least one processing condition and/or a processing order, is determined; and

wherein, in said generating step, third output-referred image data are generated from said original image data, based on said third optimizing condition; and

wherein, in said producing step, said first output device produces a second print by forming a second image on said printing medium, based on said third output-referred image data.

68. The computer program of claim 67,

wherein, in said producing step, said first output device produces said second print by forming said second image on said printing medium, based on a difference between said first output-referred image data and said third output-referred image data.

69. The computer program of claim 67,

wherein, in said producing step, said first output device produces said second print by forming both said first image and said second image on said printing medium.

70. The computer program of claim 67,

wherein, in said producing step, said first output device produces said second print by forming a reduced image,

which is obtained by reducing a third image formed from said

third output-referred image data, on said printing medium.

71. The computer program of claim 67, further comprising the

step of:

    trimming a part of a third image formed from said third

output-referred image data;

    wherein, in said producing step, said first output

device produces said second print by forming said third

image, said part of which is trimmed in said trimming step,

on said printing medium, based on said third output-referred

image data.

72. The computer program of claim 53,

    wherein, in said storing step, said original image

data, including said expanded color-range image data, and

said first optimizing condition data are stored in a

computer-readable storage medium, while correlating them with

each other.

73. The computer program of claim 53,

    wherein, in said storing step, said original image

data, including said expanded color-range image data, and

said first optimizing condition data are stored in a server

coupled to a communication network, while correlating them

with each other.

74. The computer program of claim 53,

        wherein, in said storing step, an optimization

processing program, for acquiring a fourth optimizing

condition, based on said original image data including

expanded color-range image data and said first optimizing

condition, is stored in a computer-readable storage medium.

75. The computer program of claim 74,

        wherein, in said storing step, said optimization

processing program, for generating and storing a fourth

output-referred image data, based on said original image data

including expanded color-range image data and said fourth

optimizing condition data, is stored in said computer-

readable storage medium.

76. The computer program of claim 75,

        wherein, in said storing step, said optimization

processing program, for storing said fourth output-referred

image data while correlating said fourth output-referred

image data with said original image data including said

expanded color-range image data and/or said first optimizing

condition data, is stored in said computer-readable storage

medium.

77. The computer program of claim 74,

        wherein, in said storing step, said optimization

processing program, for storing said fourth optimizing

condition data while correlating said fourth optimizing

condition data with said original image data including said

expanded color-range image data and/or said first optimizing

condition data, is stored in said computer-readable storage

medium.

78. The computer program of claim 53,

        wherein, in said acquiring step, scene-referred image

data, which are standardized from scene-referred raw data,

including device characteristics of an image-capturing

apparatus, by compensating for said device characteristics,

are acquired as said expanded color-range image data; and

        wherein, in said storing step, said scene-referred

image data and said first optimizing condition are stored

while being correlated with each other.